

Service Function Chaining  
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**NSH Context Header - Broadband**  
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Abstract

This document provides a recommended allocation of the mandatory fixed context headers for a Network Service Header (NSH) within the broadband service provider network context.

Status of this Memo

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## **1. Introduction**

The objective of SFC is trying to unload services from nodes in traditional network and deal with such services through service function chains.

As increasingly large number of customers, The possibility of deployment SFC in broadband network seems emergency. And this document is aimed to provides a recommended allocation of the mandatory fixed context headers for a Network Service Header (NSH) in broadband network.

## **2. Convention and Terminology**

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

The terms about SFC are defined in [[I-D.ietf-sfc-problem-statement](#)].

### 3. Network Service Header (NSH) Context Headers

In Service Function Chaining, the Network Service Header is composed of a 4-byte base header (BH1), a 4-byte service path header (SH1) and four mandatory 4-byte context headers (CH1-CH4).

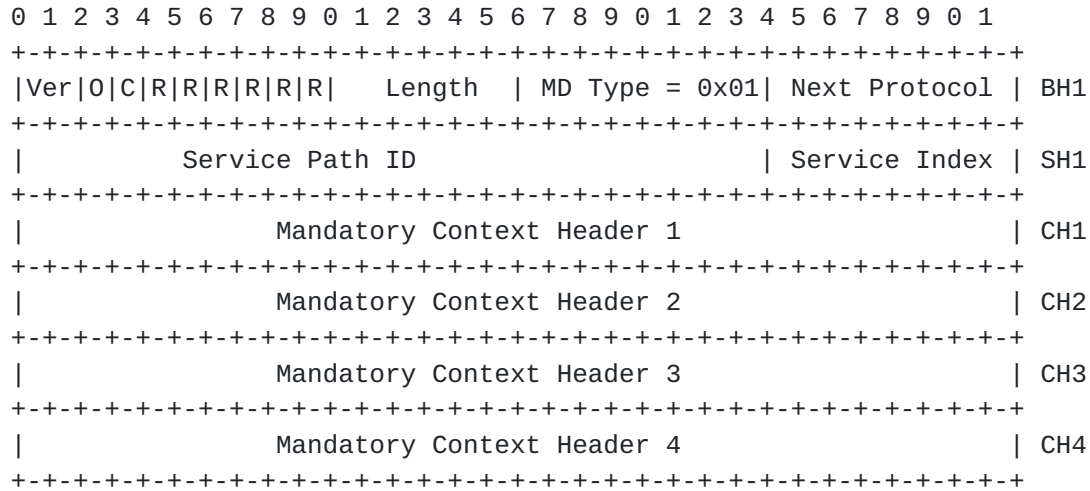


Figure 1: Network Service Header - MD Type 0x01



#### 4. Recommended Broadband Context Allocation

The following context header allocation provides information to support service function chaining in a broadband service provider network.

0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1		
+-+-+-----																																	

Figure 2: NSH Broadband Context Allocation





## **5. Broadband Allocation Specifics**

Source Node ID: An identifier indicating the source device where the original traffic initially entered the Service Function Chain. This identifier is unique within an SFC-enabled domain.

Source Interface ID: An identifier indicating the source interface where the original traffic initially entered the Service Function Chain. This identifier is scoped within the context of the Source Node ID.

User ID: The user ID indicates the user who access to the broadband network. It is unique in administrative domain.

Vlan ID : Together with Source Node ID and Source Interface ID, they indicate the access point of the user accessing.



## **6. IANA Considerations**

This memo includes no request to IANA.

## **7. Normative References**

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